VS Begins Bovine Brucellosis Surveillance Review

Veterinary Services (VS) has initiated a review of existing bovine brucellosis surveillance activities and is developing a plan for a more efficient, cost-effective surveillance program.

A VS-appointed working group is conducting the surveillance planning effort. The group, coordinated by the VS Planning Staff, includes VS representatives, State veterinarians and cattle industry representatives.

The working group is reviewing current levels of surveillance for bovine brucellosis in beef and dairy cattle, risk factor assessments, cost-benefit analyses of current testing and surveillance protocols, laboratory processes, methods for tracing infected animals and determining statistical standards for brucellosis surveillance. The group has identified several goals, including reducing redundancies of sampling, balancing the intensity of surveillance between dairy and beef cattle, maintaining current surveillance activities (i.e., slaughter surveillance and brucellosis ring testing) and maintaining a high degree of confidence about freedom from bovine brucellosis. The group is expected to present its preliminary recommendations later this year with phased-in implementation beginning in Fiscal Year 2008.

Brucellosis is a contagious, infectious and communicable disease caused by the bacteria *Brucella abortus*. It is transmitted from infected cattle, sheep, goats, elk, bison and buffalo by direct contact with blood, placenta, fetuses, or uterine secretions during pregnancy or birthing events or through consumption of contaminated raw milk products. Clinical signs are similar for all species and commonly include abortion, stillborn or weak calves, retained placentas, and decreased milk yield.

The primary rationale for brucellosis eradication is driven by the economic benefits to the cattle industry and consumers of its products. The first campaign to

control brucellosis in the United States began in 1934. By 1954, a comprehensive State-Federal brucellosis eradication program was launched. The detected number of U.S.-affected cattle herds has substantially declined since the eradication effort began.

States are designated brucellosis-free when none of their cattle or bison are found to be infected, under an active surveillance program, for 12 consecutive months. In the United States, 48 States are classified as brucellosis-free. Of the 48 States, 38 have remained in that classification for 10 or more years and 22 of those States have remained in the “class-free” category for 20 years or more. In most respects, the intensity of surveillance has remained at the same level for more than 20 years.

With the majority of the United States considered free of bovine brucellosis, the transmission risk of this zoonotic disease from wildlife to cattle and cattle to wildlife is low—with the exception of the brucellosis reservoir in the Greater Yellowstone Area (GYA).

In the GYA, brucellosis in bison and elk presents a risk to livestock. This risk is monitored through multi-agency jurisdictional management agreements. A number of Federal, State and nongovernmental organizations work together on the long-term risk management, surveillance and eventual elimination of brucellosis in elk and bison while maintaining the health of cattle herds in and around the GYA. For this reason, the working group was not directed to evaluate brucellosis surveillance in the GYA.